

Integration of Vitamin A Capsule Distribution into National Immunization Days: The Experience in Niger

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Niger has the highest documented rate of child mortality in the world, 320 per 1,000.² Numerous surveys have demonstrated levels of night blindness well above the World Health Organization (WHO) cutoff of 1% for children.^{3,4} A number of surveys have demonstrated low levels of consumption of vitamin A-rich foods and one also demonstrates low levels of serum retinol in children.^{5,6,7,8} The levels of vitamin A deficiency, morbidity patterns and high child mortality rates indicate a situation where improving vitamin A status will have a dramatic impact on reducing child death. Using a conservative estimate of a reduction of 23% in mortality of 6-59 month old children,⁹ it is estimated that improving vitamin A status of *Nigérien* children would save the lives of over 23,000 children a year. Niger is chronically food deficit, and low availability of vitamin A-rich foods, and lack of appropriate vehicles for fortification limit the potential for intervention strategies. While it is important to pursue food-based and fortification strategies for the long term, in the immediate supplementation is the only sure way of addressing the huge vitamin A deficiency problem in Niger. One of the major constraints to improving vitamin A capsule (VAC)

distribution is the very low coverage of health facilities, where only 32% of the population lives within five kilometers of a fixed health facility.¹⁰

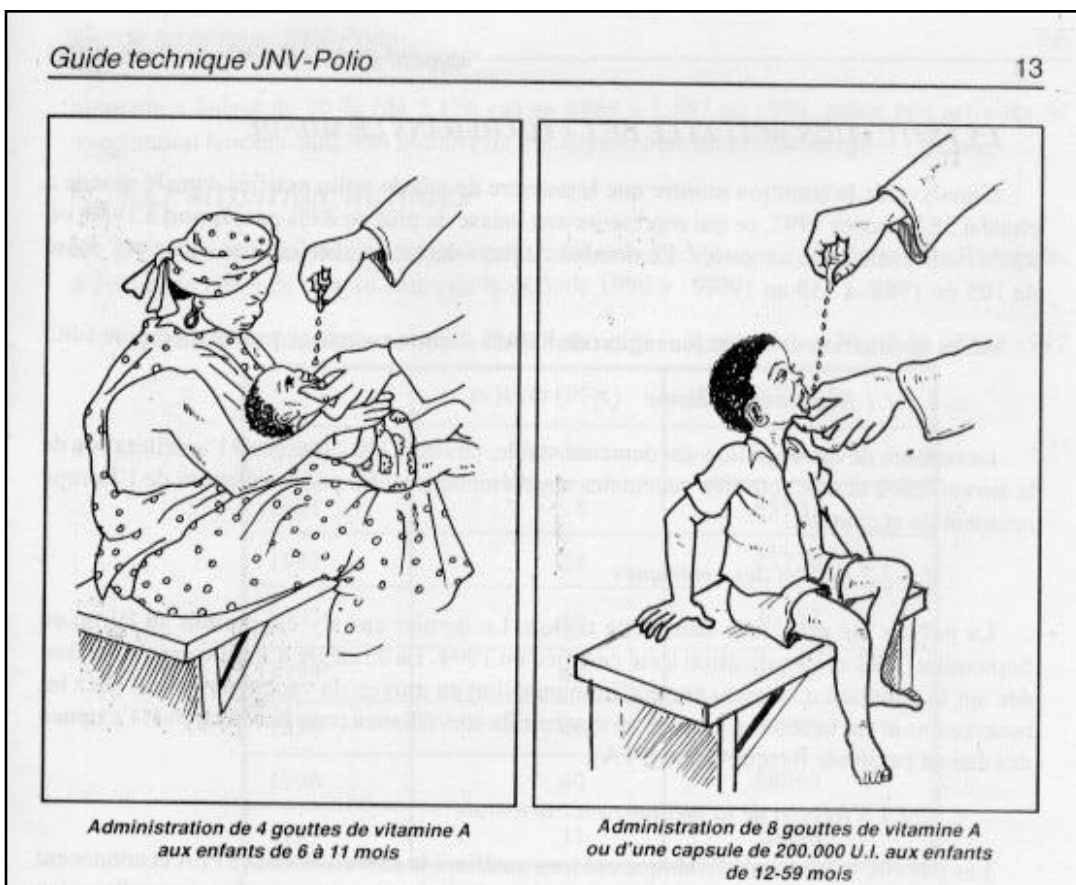
Given the dramatic potential for impact, and the low health facility coverage, it is critical to take advantage of every available opportunity to promote vitamin A interventions. The National Immunization Days (NIDs) for poliomyelitis eradication, organized in Niger during the months of November and December 1997, presented such an opportunity, and the integration of VAC distribution proved very successful. This paper summarizes the



impact on VAC coverage, the inputs required, and lessons learned from this experience.

There had been prior experience in Niger in integrating VAC distribution into immunizations. In 1996, VACs were distributed during the outreach program of the Expanded Program of Immunizations (EPI), reaching 71% of children 6-11 months (the target group of EPI), but only 19% of children 12-59 months.¹¹ This prior experience with the EPI, and smaller-scale supplementation and nutrition education projects in Maradi and Tahoua departments were crucial in establishing the environment of confidence that facilitated the integration of VAC distribution into NIDs. In West Africa, NIDs for poliomyelitis eradication were organized for the first time in the last trimester of 1997, and it is scheduled to organize them during 1998 and 1999. In Niger, an organizational committee was established, under the auspices of the General Secretariat of the Ministry of Public Health and meetings were started as of August 28, 1997.¹² Members included two United Nations agencies, eight donor agencies (including the Rotary Club), thirteen Government structures and two non governmental organizations (Helen Keller International and CARE International).¹³

During the first meetings, Helen Keller International lobbied hard for including VAC distribution in the NIDs, and found a very supportive audience within the National EPI directorate and the Secretary General. The decision was made to include VACs in the second round of the NIDs, in December 1997. During the following months, Helen Keller International nurtured the process to ensure success, providing technical assistance, VACs, small-scale financing, and constant reassurance. The results in VAC coverage are very impressive. It is estimated that the total target



population of children 6-59 months was 1,818,000. During the second round of NIDs, 1,753,590 doses of VAC to children 6-59 months. With a total 6-59 old population estimated at 1,818,000, it is estimated over 95% of children 6-59 months received a vitamin A capsule in December 1997.¹⁴

The additional inputs required to incorporate VAC distribution into NIDs are relatively minor, especially when compared to the very impressive results. The table below summarizes the additional inputs. It might be noted that in addition, considerable staff time of Helen Keller International was dedicated to this, which is not considered here.

<i>Summary of Inputs for Integration of Vitamin A Capsules into National Immunization Days in Niger in 1997</i>		
Description of Input	Quantity	Approximate Cost
Vitamin A Capsules (received as part of Gifts-in-Kind program) (1)	1,862,500 capsules (200,000 UI)	\$90,918
Illustrations and instructions for administration of VACs incorporated into NID technical manual (2)	5 drawings	\$103
Radio spots on vitamin A capsules for second round of NIDs (2)	1 radio spot, with versions in French, Hausa and Djerma	\$256
Logistics support to the four health districts where HKI implements a child survival project (2, 3)	4 vehicles were loaned, with drivers and necessary fuel	\$6,033
Approximate total additional costs		\$97,310.00
Notes: (1) Value of VACs is estimated at \$0.045 per capsule. In addition, shipping costs were approximately \$7,105. (2) Exchange rate used is US\$1.00 = FrCFA 585. (3) These inputs were not actual additional costs for including VACs, but since VACs were included in the NIDs, HKI decided to support the NID effort in our four target districts. There are a total of 42 health districts in Niger. Source: HKI financial records.		

Lessons Learned:

- The most important lesson learned is that integration of VAC distribution into NIDs can be successful, even during the first year of organizing NIDs. The additional costs are relatively minor. It is clearly wise to add VACs to the second round of the NIDs, since the logistical difficulties of organization will have been worked out during the first round.
- It requires more than advocacy to make it work, advocacy needs to be combined with nurturing. In the case of Niger, the fact that one of the partners (HKI in this instance) involved in the organizing committee had specific experience integrating VAC distribution into NIDs in other countries, helped develop a sense that it could be done and overcome many of the obstacles.

- Integration of VAC distribution into NIDs means that for the first time in Niger, every health worker in the country has participated in a vitamin A intervention. It is crucial to build on this momentum to develop long term, comprehensive vitamin A programs, and not let it be felt that this one shot will resolve vitamin A deficiency. One of the immediately follow-on actions has been to distribute large, colorful micronutrient utilization guides to every health facility in the country in April 1998.
- Ready availability of VACs is critical. In this case, HKI was fortunate in being able to respond in a very timely fashion to deliver the necessary number of capsules. Given that organization of NIDs didn't start until late August, it is unlikely that VACs could have been procured through 'normal' channels in time for the NIDs. It is necessary to put into place more permanent channels for VAC supplies.
- Combined with the above point is the necessity of flexible funding to respond to needs as they are identified during the organization of the NIDs. In this case, the funding required was not great, but a number of low cost inputs were critical to the success of the NIDs, including ongoing technical assistance from HKI's office, development of the VAC section of the technical documentation, radio spots on VACs being added to the NIDs information campaign in December and shipment costs for VACs.
- It is important to dissipate any resentment from other partners about adding VACs. One member of the committee said that '*you are grafting vitamin A onto our NIDs*', to which the response was '*in horticulture, one uses grafting to improve yield*' and proceeded to demonstrate that in other countries, adding VAC increased coverage of NIDs. This is to illustrate that it is important to invest energy in bringing all the partners in the NIDs on board concerning VAC distribution.
- It is necessary to make sure that the technical documentation provided for health workers includes good documentation on the importance of vitamin A and how to administer vitamin A capsules.
- In the case of Niger, needs were projected from the last census, which took place in 1988. *Nigérien* populations are very mobile, particularly after the harvest period. The number of children reached in many of the southern districts exceeded estimations, and the numbers in many of the northern districts was below estimations. This is almost certainly due to population movements. On a practical level, since it is difficult to know precisely what actual needs for coverage will be in each district, it means that it is important to provide a larger buffer stock of VACs at district level to respond to needs that exceed estimates.
- In Niger, the private sector is taking on an increasingly important role in health coverage, particularly in urban centers. Often training doesn't include private sector workers, who then don't have access to up-to-date information. In the future, it is important to ensure that the private sector receives adequate information on VAC distribution.

- In this case, Helen Keller International was able to play the role of ‘broker’ to facilitate integration of VACs because of a long history of partnership with the Ministry of Health, at the district and national level, and concrete experience in VAC distribution in a number of countries.

In conclusion, Niger, the country with the highest rate of child death in the world, and ranked 173 out of 175 in human development,¹⁵ met the challenge of integrating VAC distribution into their NIDs, and did so very successfully. In the African regional meeting of the World Health Organization of EPI programs, Niger was congratulated on its achievement, and it was recommended that “Other countries should follow the example of Niger and integrate vitamin A capsule distribution into their national immunization days.”¹⁶

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¹³ *Ministère de la Santé Publique, Direction Nationale du Programme Elargi de Vaccination. Arrêté No. 00114 du 11 juin 1997 Portant création d’un comité technique pour la Campagne de l’éradication de la Poliomyélite.*

¹⁴ Population data are projected from the 1988 general population census. Distribution figures are from reports of the National Immunization Directorate.

¹⁵ Human Development Report 1997. United Nations Development Programme. 1997.

¹⁶ WHO Africa Regional EPI Meeting, Abidjan, Côte d’Ivoire, March 1998.